

A Computer-based Approach to Analyze Some Aspects of the Political Economy of Policy Making in India

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To understand the policy process appropriately, it is essential to obtain a bird's eye view of the political economy around policies. Some aspects of political economy analysis deal with the study of relationships between the government and the market, which includes corporations, business-persons, and other corporate entities related to trade and production. We develop a technological platform to analyze such aspects of the political economy around important policies in India, which in turn can aid citizens to obtain a good understanding of forces that shape policies. The contribution of this thesis is that it shows that such analysis can be performed using publicly available web and media data, using a suite of computer scientific tools and techniques.

In this thesis, we study a few aspects of political economy analysis, namely the interlocks between the corporate and state entities, the kind of statements made by these entities in popular media, the bias in policy representation carried by the mass media and the social media, and the policy discourse that occurs in these media sources and in the Parliament. Our findings suggest that interlocks between corporate and government entities are increasing over time, which could lead to their increasing influence in policy making. We also find that the mass media is biased towards specific entities and topics relevant to the policies, and that the representation of policies in the mass media and the Parliament does not equitably cover issues relevant to all sections of people. Moreover, policy discourse in popular media chiefly includes the views of politicians and business-persons, and does not provide adequate attention to the views of policy experts or academicians who can provide valuable insights on technical nuances and problems in policy implementation. Social media is seen to echo the biases carried by mass media, unable to counter these biases. Additionally, we also propose a novel news recommendation algorithm which can counter the issue of algorithmic bias by ensuring fairness and diversity in representation of various topics relevant to the policies.

While several studies have already been done in the domain of political economy analysis, this thesis is the first work that attempts to analyze some aspects of the political economy around policy making, in the Indian context, using computer scientific techniques on large scale, and publicly available data. Our findings from this work have been updated in a website with the objective of reaching a target audience of journalists, social activists, policymakers, researchers and citizens in general. We believe that the technological platform suggested in this thesis can serve to make people more aware of the political economy that affects policy-making, peoples' opinion on these policies, democracy, and ultimately their lives and the lives of others.

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MS Teams: <https://teams.microsoft.com/l/meetup-join/19%3a5bc8efcb9b5a486d8ee8d6e5971a36a6%40thread.tacv2/1601286475055?context=%7b%22Tid%22%3a%22624d5c4b-45c5-4122-8cd0-44f0f84e945d%22%2c%22Oid%22%3a%22067d684a-4355-4a99-bd04-aa4d344e53fe%22%7d>